

Claims:

1. (Currently Amended) A method for processing input media in a computing device, the method comprising:

using a reconstructed-frame-caching device, caching a reconstructed frame according to a set of criteria;

receiving a request to scrub to a predictive frame of input media; and

decoding the predictive frame starting with the reconstructed frame.

2. (Original) A method as recited in claim 1, wherein the caching is by a component in a media pipeline.

3. (Original) A method as recited in claim 1, wherein the caching is by a media engine, a media processor, a media decoder, or an effect transform component of a media pipeline.

4. (Original) A method as recited in claim 1, wherein the caching is responsive to playback of the input media.

5. (Original) A method as recited in claim 1, wherein the caching is responsive to detection of a reverse playback operation by an application interfacing with a media platform.

6. (Original) A method as recited in claim 1, wherein the caching is performed independent of input media playback.

7. (Original) A method as recited in claim 1, wherein the reconstructed frame is a latest reconstructed frame in a timeline specified by the input media or the application.

8. (Original) A method as recited in claim 1, wherein the request is sent by an application, the application not being part of the media pipeline.

9. (Original) A method as recited in claim 1, wherein the criteria is based on a periodic time interval, available system memory, a requesting application playback rate, a detected display device resolution, a determination that the application repeatedly requests similar frames of input media, determining that the application has reverse playback capabilities, and/or a request from the application to play a portion of the input media in reverse.

10. (Previously Presented) A method as recited in claim 1, wherein the reconstructed frame is of a particular media type of multiple possible media types that are cached by a component of a media engine in a media processing pipeline.

11. (Previously Presented) A method as recited in claim 1, wherein responsive to receiving the request and before decoding, the method further comprises:
determining that there is a cached reconstructed frame representing a complete decoded version of an inter-frame of the input media, the cached reconstructive frame being associated with a time less than or equal to a time of the predictive frame; and
wherein the cached reconstructed frame is the reconstructed frame.

12. (Original) A method as recited in claim 1, wherein the method further comprises specifying, by a media engine portion of a media platform, a location in a media pipeline for caching the reconstructed frame.

13. (Original) A method as recited in claim 12, wherein the location is subsequent to decoding of the input media and prior to any effect transformation on decoded frames.

14. (Original) A method as recited in claim 12, wherein the location subsequent to an effect transformation on decoded frames.

15. (Original) A method as recited in claim 1, wherein the method further comprises interfacing, by an application separate from a media platform, with a media engine component of the media platform to specify a location in a media pipeline for caching reconstructed frame.

16. (Original) A method as recited in claim 15, wherein the location is subsequent to an effect transform component that operates on decoded frames of the input media.

17. (Currently Amended) A computer-readable media comprising computer-executable instructions for processing input media in a computing device, the computer-executable instructions comprising instructions for:

 caching a reconstructed frame according to a [[set]] plurality of criteria;
 receiving a request to scrub to a predictive frame of input media; and
 decoding the predictive frame starting with the reconstructed frame.

18. (Original) A computer-readable media as recited in claim 17, wherein the caching is by a media engine, a media processor, a media decoder, or an effect transform component of a media pipeline.

19. (Original) A computer-readable media as recited in claim 17, wherein the request is sent by an application that is independent of a media processing pipeline, and wherein the criteria is based on periodic time intervals, available system memory, a requested playback rate, a detected display device resolution, a determination that similar frames of input media are repeatedly requested, determining that an application for playback of the input media has reverse playback capabilities, and/or a request from the application to play a given section of content in reverse.

20. (Original) A computer-readable media as recited in claim 17, wherein the caching is by a component in a media pipeline.

21. (Previously Presented) A computer-readable media as recited in claim 17, wherein responsive to receiving the request and before decoding, the computer-executable instructions further comprise instructions for:

determining that there is a cached reconstructed frame representing a complete decoded version of an inter-frame of the input media, the cached reconstructive frame being associated with a time less than or equal to a time of the predictive frame; and

wherein the cached reconstructed frame is the reconstructed frame.

22. (Original) A computer-readable media as recited in claim 21, wherein the request is sent by an application that is independent of a media processing pipeline and wherein the reconstructed frame is a latest reconstructed frame in a timeline specified by the input media or the application.

23. (Original) A computer-readable media as recited in claim 17, wherein the request is sent by an application that is independent of a media processing pipeline, and wherein the application enables reconstructed frame caching.

24. (Original) A computer-readable media as recited in claim 17, wherein the request is sent by an application that is independent of a media processing pipeline, and wherein the computer-program instructions further comprise receiving, from the application, a location in the media processing pipeline to implement the reconstructed frame caching.

25. (Original) A computer-readable media as recited in claim 24, wherein the location is subsequent to an effect transform component that operates on decoded frames of the input media.

26. (Original) A computer-readable media as recited in claim 24, wherein the location is immediately subsequent to a media decoding module.

27. (Currently Amended) A computing device for processing input media, the computing device comprising:

a processor; and

a physical memory coupled to the processor, the memory comprising computer-program instructions executable by the processor for:

during playback of a media stream, caching a reconstructed frame according to a [[set]] plurality of criteria, wherein the reconstructed frame comprises a decoded multimedia content frame, and wherein the criteria for caching the reconstructed frame is based on:

a detected display device resolution,

repeated requests for similar frames of input media,

an indication that a playback application has reverse playback capability, and

a received request from a playback application to play a given section of content in reverse;

receiving a request to scrub to a predictive frame of input media, the predictive frame following an intracoded frame within a group of pictures; and decoding the predictive frame starting with the reconstructed frame.

28. (Original) A computing device as recited in claim 27, wherein the caching is by a media engine, a media processor, a media decoder, or an effect transform component of a media pipeline.

29. (Currently Amended) A computing device as recited in claim 27, wherein the request to scrub is sent by an application that is independent of a media processing pipeline, and wherein the criteria is further based on periodic time intervals, decoded frame size, [[and]] available system memory, ~~a requesting application requested~~ playback rate, a detected display device resolution, and a determination that the application repeatedly requests similar frames of input media; ~~determining that the~~

~~application has reverse playback capabilities, and/or a request from the application to play a given section of content in reverse.~~

30. (Original) A computing device as recited in claim 27, wherein the caching is by a component in a media pipeline.

31. (Previously Presented) A computing device as recited in claim 27, wherein responsive to receiving the request and before decoding, the computer-program instructions further comprise instructions for:

determining that there is a cached reconstructed frame representing a complete decoded version of an inter-frame of the input media, the cached reconstructive frame being associated with a time less than or equal to a time of the predictive frame; and wherein the cached reconstructed frame is the reconstructed frame.

32. (Original) A computing device as recited in claim 31, wherein the request is sent by an application that is independent of a media processing pipeline and wherein the reconstructed frame is a latest reconstructed frame in a timeline specified by the input media or the application.

33. (Original) A computing device as recited in claim 27, wherein the request is sent by an application that is independent of a media processing pipeline, and wherein the application enables reconstructed frame caching.

34. (Original) A computing device as recited in claim 27, wherein the request is sent by an application that is independent of a media processing pipeline, and wherein the computer-program instructions further comprise receiving, from the application, a location in the media processing pipeline to implement the reconstructed frame caching.

35. (Original) A computing device as recited in claim 34, wherein the location is subsequent to an effect transform component that operates on decoded frames of the input media.

36. (Original) A computing device as recited in claim 34, wherein the location is immediately subsequent to a media decoding module.

37-52. (Canceled)